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LERNER, DAVID, LITTENBERG,			PARVINI, PEGAH	
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WESTFIELD,			1755	
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Please find below and/or attached an Office communication concerning this application or proceeding.

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#### **DETAILED ACTION**

### Specification

1. The disclosure is objected to because of the following informalities: The word "colour" should be spelled as "color" in paragraphs [0006] and [0026]. Also, wrong article, "a", has been used before the word "uncoated" in paragraph [0019]; it should be "an".

Appropriate correction is required.

### Claim Objections

- 2. Claim 8 is objected to because of the following informalities: the word "centre" should be spelled as "center". Appropriate correction is required.
- 3. Claim 29 is objected to because of the following informalities: the last three words should be "in claim 17" not "is claim 17". Appropriate correction is required.

## Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 1, 17, 33, and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims read as "... at least one layer substantially totally coating ...". It is noted that the term "totally" which is followed just after "substantially" implies the meaning of completely. Therefore, the two terms or "substantially" and "totally" used together in the above claims have conflicting ranges and make the above claims indefinite.

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1, 9-13, 16-17, 19-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5888879 to Nishikata et al. in view of U.S. Patent Publication No. 2003/0064039 A1 to Kolodziej et al.

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8. With reference to claim 1, 9, 11, 13, 16-17, 19-24, and 26-27, Nishikata et al. disclose the use of irradiating light having a wavelength range of visible light onto the surface of human skin on which the make-up cosmetic product is applied to measure a plurality of spectra of reflected light considering the fact that the lights have incident angles of 10 to 60 and 75 to 90 degrees with respect to the surface of human skin (Column 2, Lines 50-64). Figures 1 and 2 show spectral reflectance in percentages to the wavelength of lights being reflected on normal skin and on the skin on which a foundation has been applied with wavelengths of lights being in the range of 400 to 700µm; as it is shown in the diagrams, the difference between the spectral reflectance of the normal skin and that of the skin with foundation is between 2% to 5% (Fig.1, Fig2; Column 4, Lines 66-67; Column 5, Lines 1-11). Nishikata et al., also, indicates how optical effects defocus the make-up so that the skin appears natural (Column 1, Lines 33-34; Column 2, Lines 9-11). It is noted that the application in its most preferred embodiment claims interference pigment particles, which recreate the appearance of the skin more faithfully (paragraph [0009]).

The prior art does not disclose a multilayer interference pigment nor does it disclose a physiologically acceptable medium.

9. Kolodziej et al. disclose a product for the complexion (foundation), a face powder, or a body make-up product, which can modify the visual appearance of the contours of the face and give it a natural color effect and aid skin in achieving a good camouflaging of skin imperfections (paragraphs [0005], and [0007]). It discloses that the intended pigments have multilayer interference structure; in addition, it teaches that

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the structure is composed of alternate layers of low and high optical index (paragraphs [0016], and [0022]). Additionally, it teaches that "physiologically acceptable medium" means a medium that is compatible with human keratin materials such as skin (paragraph [0011]). In addition, it discloses a color path in the a\*b\* of the 1976 CIE calorimetric space which corresponds to a variation Dh of the hue angle h of at least 20° when the angle of observation is varied relative to the normal between 0° to 80° for an angle of light incidence of 45° (paragraph [0013]). Moreover, the prior art teaches that the disclosed multilayer interference pigment is being made of at least one material chosen from the group of for example ZnS, ZnSe, Si, SiO<sub>2</sub>, Ge, Te, Fe<sub>2</sub>O<sub>3</sub>, Pt, Va, Al<sub>2</sub>O<sub>3</sub>, MgO, Y<sub>2</sub>O<sub>3</sub>, S<sub>2</sub>O<sub>3</sub>, SiO, ZrO<sub>2</sub>, CeO<sub>2</sub>, Nb<sub>2</sub>O<sub>5</sub>, Ta<sub>2</sub>O<sub>5</sub>, TiO<sub>2</sub>, Ag, Al, Au, Cu, Rb, Ti, Ta, Zn and combination thereof; in addition, it discloses that the composition may comprises of additional agents such as water or mixture of water and hydrophilic organic solvent such as alcohol and filler, vitamins, thickeners, trace elements, softeners, sequestering agents, fragrances, acidifying or basifying agents, preserving agents and mixtures thereof (paragraphs [0017], [0047], [0051], [0063]). It is noted that the application in its most preferred embodiment indicates that the multilayer interference pigment contains fillers, and other elements such as softeners, sequestering agents, vitamins and more and that comprises at least one layer made of a material chosen form the group indicate above (paragraphs [0018], [0065], [0066], [0068], and [0069]).

10. It would have been obvious to include in Nishikata et al. the indication of the use of a multilayer interference pigment as taught by Kolodziej et al. motivated by the fact

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that both disclose a make-up cosmetic product to be used on the skin in which the makeup color corresponds to the color of the human skin, thus giving it a natural effect and defocusing the make-up. In addition, the formulations for the foundations shown in examples by Nishikata et al. uses mixture of some of the above indicated elements and additives which have been disclosed by Kolodziej et al. and have been pointed out by the application (Nishikata et al. Column 9,10, and 11). Although the details indicated above are not in the claims of the application, the specification has discussed and used those element and additives in describing the claimed invention in the spec and partially in the examples and it is believed that the properties mentioned in the claims for the claimed multilayer interference pigment are based on the proposed multilayer interference pigment disclosed in the specification.

It is noted that the applicant in the specification describes the "substantially coating an underlying layer" as not mean that each layer must totally coat the layer it covers (paragraph [0019]).

- 11. With reference to claims 10, 12, 25, and 28, it is noted that in addition to the above detailed description, the application claims "about" 2% where it talks about the difference between the spectral reflectance and the reference spectral reflectance; thus, the prior arts meet the limitations of these claims.
- 12. With reference to claim 29-32, Kolodziej et al. discloses that its claimed composition is to be applied to the skin so that the skin achieves a good camouflaging of skin imperfections (paragraph [0007]) and Nishikata et al. discloses the process

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through which the pigment is applied on the skin and the reflected light is being measured (Column 8, Lines 16-30).

- 13. Claims 2-3, 8, 14-16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishikata et al. and Kolodziej et al. as applied to claims 1, 9-13, 16-17, 19-32 above, and further in view of U.S. Patent No. 5082660 to Ounanian et al.
- 14. With reference to claims 2-3, 8, 14-16, and 18, Nishikata et al. and Kolodziej et al. in combination together disclose an multilayer interference pigment wherein the spectral reflection of the composition applied to its support, human skin, for the range of the visible light spectrum of 400 to  $700\mu m$  is between 2% to 5% as discussed above in details.

The prior arts do not disclose a shape or the size for the pigment.

- 15. Ounanian et al. teaches that an improved foundation composition which provides smooth skin tone and blurs the fine skin lines, pores, and imperfection has spherical shape particles with a diameter of up to 30μm (Column 2, Lines 61-64; Column 3, Lines 4-7). Also, the prior art discloses that other additives which may be added to the composition are water, matte finishing agents, moisturizing agents, thickening agents, fragrances, and preservatives (Column 4, Lines 27-32, 36-38, and 61-62; Column 5, 42-43, and 56-57; Column 6, Lines 28-30).
- 16. It would have been obvious to modify Nishikata et al. and Kolodziej et al. to include the pigment particle size and shape as taught by Ounanian et al. The

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motivation for doing so would be because the latter prior art teaches an improved cosmetic product, which provides a smooth human skin tone and texture and hides the imperfections and that the other prior arts, also, disclose or discuss the effect of a cosmetic product to be applied on the skin and which gives a natural color effect to the skin and do not appear to be easily detectible once applied on the skin, defocused make-up. In addition, it is noted that the components and additives disclosed by Ounanian et al. have been, for most parts, disclosed in Kolodziei et al. as well, therefore, suggesting the same pigment.

- Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over 17. Nishikata et al., Kolodziej et al., and Ounanian et al. as applied to claims 1-3, 8-32 above, and further in view of U.S. Patent Application Publication No. 2003/0035883 A1 to Nishikata et al.
- With reference to claims 4-7, Nishikata et al., Kolodziej et al., and Ounanian et al. 18. in combination together disclose an multilayer interference pigment wherein the spectral reflection of the composition applied to its support, human skin, for the range of the visible spectrum of 400 to 700 µm is between 2% to 5% with spherical shape pigment with a diameter of up to 30 microns as discussed above in details.

The prior arts do not disclose the shape and size of the substrate.

Nishikata et al. in the Patent Application Publication No. 2003/0035883 A1 19. teaches a coated powder in which the core is spherical shape silica with particle size of Application/Control Number: 10/664,197 Page 9

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0.045 to 45μm and more preferably 0.3 to 28μm in which the silica is coated with a mixture of iron and silica or titanium as a few examples (paragraphs [0009], [0022]). In addition, the prior art discloses that the conventionally silica, titanium dioxide or silica having a metal oxide such as titanium coated on the surface thereof has been known as pigments in cosmetics (paragraph [0002]).

- 20. It would have been obvious to modify the previously used prior arts to include the size and shape of the substrate as taught by Nishikata et al. (in the Patent Application Publication No. 2003/0035883 A1) motivated by the fact that Nishikata et al. discloses a cosmetic product which because of the spherical shape of its core allows light to diffuse and transmit uniformly. It is noted that the prior art, also, indicates that the end product pigment is multilayer (paragraphs, [0010] and [0011]) and that the ingredients used are among the ones disclosed by Kolodziej et al. and the ones which describe the nature of the multilayer interference pigment discussed in the application with claimed properties. As disclosed by the prior art, the spherical shape of the powder disclosed is preferable because it allows light to diffuse and transmit uniformly (paragraph [0009]). Also, the disclosed invention includes make-up base, foundation, and other cosmetic materials and that can contain additives such as thickeners, perfume, preservatives, and more (paragraph [0015]).
- 21. Claims 33-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishikata et al. and in view of Kolodziej et al.

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With reference to claims 33-40, the above-indicated prior arts and details mentioned above disclose a multilayer interference pigment in which the spectral reflectance differs for at least a portion of the visible spectrum 200nm broad by about 2% to 5% from the reference spectral reflectance (Nishikata et al. Column 2, Lines 50-64; Fig. 1, Fig. 2; Column 4, Lines 66-67; Column 5, Lines 1-11) (paragraphs [0005], [0007], [0011], [0013], [0016], [0017], [0022], [0047], [0051], [0061]). It is noted that Nishikata et al. teaches the process of making the instant pigment (Columns 9, 10, and 11) and the components and additives are among the ones disclosed by Kolodziej et al. and discussed in the specification of the application. It is, also, noted that the spectral reflectance measurement is made based on the human skin as disclosed by Nishikata et al. and Kolodziej et al. and described above in details in rejecting claim 1.

It is noted that the applicant described the "substantially coating an underlying layer" as not mean that each layer must totally coat the layer it covers in the specification (paragraph [0019]).

#### Conclusion

- The prior art made of record and not relied upon is considered pertinent to 22. applicant's disclosure.
  - U.S. Patent Application Publication No. 2003/0104022 A1 to Victor.
  - U.S. Patent No. 6677042 to Kuntz et al.
  - U.S. Patent No. 6517627 to Atarashi et al.

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U.S. Patent No. 6117435 to Painter et al.

U.S. Patent No. 4744832 to Franz et al.

U.S. Patent No. 6428773 to Oko et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pegah Parvini whose telephone number is 571-272-2639. The examiner can normally be reached on Monday to Thursday 8:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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PP

DAVID SAMPLE PRIMARY EXAMINER